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A SIMPLE METHOD FOR PREPARING UNIFORM MINUTEN-PIN DOUBLE MOUNTS

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There are many advantages to using minuten pins for mounting small Diptera, or other small insects, in place of triangular points or the attachment of specimens to larger pins by some adhesive material. Uniform minuten-pin double mounts of a relatively small size are more useful and aesthetically pleasing than those of the usual array of various shapes and sizes.

We found the following procedure for preparing uniform and consistently neat minuten-pin double mounts both rapid and simple. We first cut discs, 5.0 mm. in diameter, from $\frac{1}{8}$ "-thick sheet cork with an eyelet punch (Fig. 1). No. 2 insect pins are then pushed through the center of each disc with pinning forceps. The cork discs will be automatically aligned at the proper height on the pins if the discs are placed on the uppermost stage of an in-

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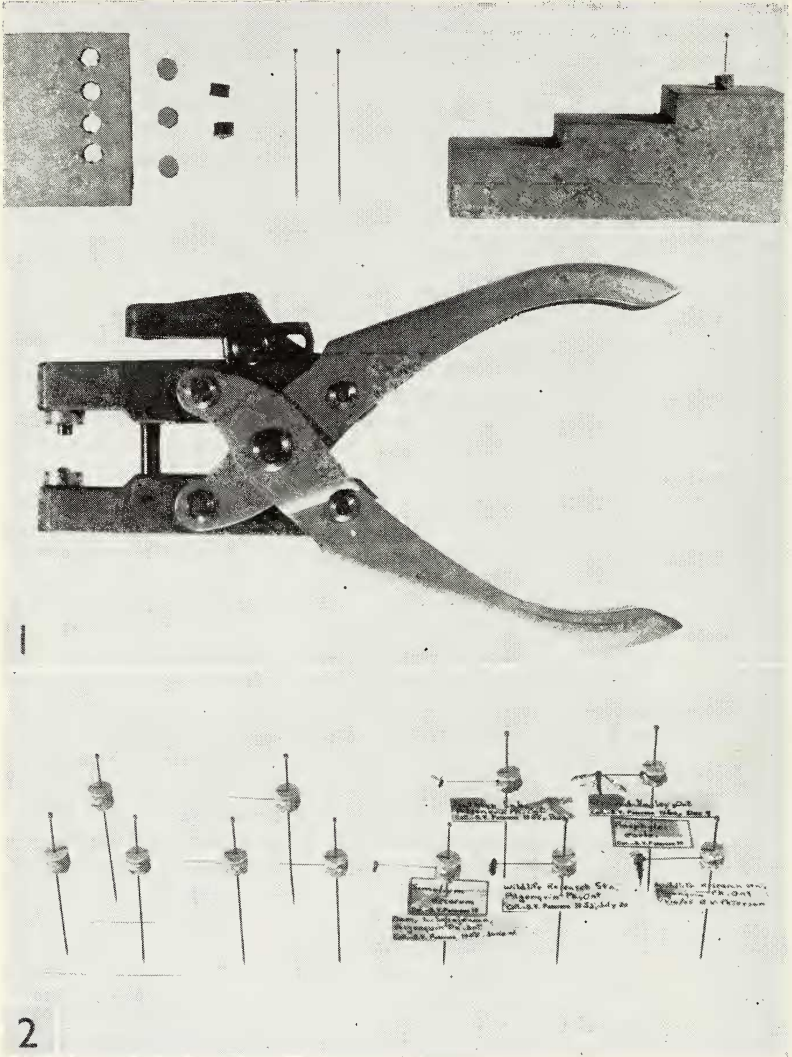


Fig. 1, Material and equipment used for the preparation of minuten-pin double mounts (refer to text for details). Fig. 2, minuten-pin double mounts before insertion of the minuten pins (left); after insertion of the minuten pins (center); and with mounted specimens (right).

sect pinning block. The 5.0 mm. discs do not obscure the labels to any appreciable extent (Fig. 2); however, smaller discs can be made by using a finer eyelet punch and thinner sheet cork. If smaller discs are used, there is the danger of the cork fragmenting, both when the discs are cut and when the insect pins are forced through them.

The pointed end of the minuten pin is pushed into the cork disc at right angles to the No. 2 pin with dissecting forceps and forced out the other side. Some care is needed in this step because the minuten pins bend very easily. When the minuten pin is pushed through the cork so that the blunt end is flush with the disc, a 4.0-5.0 mm. length of the pin shaft should be embedded in the cork as an anchor, and 5.0-8.0 mm. should project beyond the cork; the latter figure will vary with the length of the minuten pin. With practice, complete double-mounts can be prepared at the rate of approximately 75 per hour.

To mount the specimen, the insect is placed in the desired position, and the minuten pin is inserted. The position of the freshly killed or thoroughly relaxed specimen can then be adjusted before the insect hardens.

We have used these pins for mounting mosquitoes, black flies, and other small Diptera, and find our collections are much neater because of the uniformity of these pins.

The material and equipment needed for the preparation of the double mounts are minuten pins, No. 2 insect pins, pinning forceps, dissecting forceps, $\frac{1}{8}$ " sheet cork and a 5.0 mm. eyelet punch (we use the Velos No. 950 punch). The eyelet punch is a parallel-jawed paper punch which delivers smoother, less compressed discs than does the snip-action type. This, or a comparable punch, should be available from any office supply company.

PUBLICATIONS RECEIVED

A manual of Common Beetles of Eastern North America, by Eliz. S. and L. S. Dillon, 883 pp., 544 text figs., plus 81 plates, 5 x 8 inch pages, clothbound. 1961. Row, Peterson and Co., Evanston, Ill. The first relatively comprehensive beetle manual to appear in 50 years. The species covered make up 90 per cent of the beetles likely to be encountered in Eastern North America. Keys to families and full descriptions of each family, genus, and species are included. This book is intended for the casual naturalist, the amateur collector, the serious student, and the professional who needs a ready reference work. (List price, \$9.25).